

DETAILED ACTION

1. Please note: the examiner of record has changed. However, the Technology Center (TC1600) and Art Unit (AU1639) remain the same.

Status of the Claims

2. The amendment to the claims received on December 31, 2008 canceled claims 1-14, 25, 27-29, 36-41, 44, 49-50, 57, 61-63, 73, 92, and 98 and amended claims 42, 47-48, 68, 70, 72, 74, 84, 88, 93-94, 96-97, and 99.

Claims 15-24, 26, 30-35, 42-43, 45-48, 51-56, 58-60, 64-72, 74-91, 93-97, and 99 are currently pending and under consideration.

Priority

3. The present application claims status as a CIP of 08/327,513 filed October 18, 1994 (now U.S. Patent 5,985,356).

New Objection

Claim Objections

4. Claim 47 is objected to because of the following informalities: a comma between interdiffusing and interspersing is missing (see line 4). Appropriate correction is required.
5. Applicants are also respectfully requested to carefully review the claims for any other informalities.

Withdrawn Rejections

6. The rejection of claims 15-19, 23, 24, 26, 30-33, 42, 43, 45-49, 51-55, 59, 60, 64-72, 74-78, 80, 82, 83, 88-91, 93, 96 and 99 under 35 U.S.C. 102(b) as being anticipated by Pohn et al.

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(Pohm, A. -V.; Wang, J. -M.; Lee, F. S.; Schnasse, W.; Smay, T. A. "High-Density Very Efficient Magnetic Film Memory Arrays" IEEE Transactions on Magnetics, **1969**, Mag-5, 3, 408-412) as evidenced by Maxwell et al. (Maxwell, J.; Doty, M. "Processing Guidelines for S.M.P.S. Multilayer Ceramic Capacitors", 2005, 1-6) and Kitada et al. (Kitada, M.; Yamamoto, H.; Tsuchiya, H. "Reaction Between Permalloy and Several Thin Metal Films" Thin Solid Films **1984**, 122, 173-182) and Mattox (Mattox, D. M. "Physical Vapor Deposition (PVD) Processes" *Metal Finishing 2002*, Volume 100, Supplement 1, Pages 394-408) is withdrawn in view of the claim amendments received on December 31, 2008.

7. The rejection of claims 15-24, 26, 30-35, 42, 43, 45-48, 51-56, 58-60, 64-72, 74-91, 93, 95, 96, and 99 under 35 U.S.C. 103(a) as being unpatentable over Pohm et al. (Pohm, A. -V.; Wang, J. -M.; Lee, F. S.; Schnasse, W.; Smay, T. A. "High-Density Very Efficient Magnetic Film Memory Arrays" IEEE Transactions on Magnetics, **1969**, Mag-5, 3, 408-412) in view of Howard et al. (Howard, J. K.; White, J. F.; Ho, P. S. "Intermetallic compounds of Al and transitions metals: Effect of electromigration in 1-2- μ m-wide lines" J. Appl. Phys. 49(7), 1978, 4083-4093) and Makino et al. (Makino, K.; Kawakami, S.; Orihara, S.; Sakai, S. "A Highly Reliable Plated Wire: Study on Corrosion of Magnetic Films" IEEE Transactions on Magnetics **1973**, Mag-9, 3, 500-503) and Lee (Lee, F. S. "A High-Density Coupled-Magnetic-Film Memory Array" IEEE Transactions on Magnetics 1971, Mag-7, 4, 808-872) and Brown et al. (Brown, et al. "High Density Devices using Permalloy propagation of wall-coded bubbles" IEEE Transactions on Magnetics **1979**, Mag-15, 6, 1501-1506) and Jubb et al. (Jubb et al., "Coercivity, structure, and stoichiometry of Permalloy/alumina multilayers" J. Appl. Phys. **1985**, 57, 1, 4192-

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4194) as evidenced by Maxwell et al. (Maxwell, J.; Doty, M. "Processing Guidelines for S.M.P.S. Multilayer Ceramic Capacitors", 2005, 1-6) and Kitada et al. (Kitada, M.; Yamamoto, H.; Tsuchiya, H. "Reaction Between Permalloy and Several Thin Metal Films" Thin Solid Films **1984**, 122, 173-182) is withdrawn in view of the claim amendments received on December 31, 2008.

New Rejections

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 1010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 42, 46-47, 60, 64, and 67 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 7,320,858.

Although the conflicting claims are not identical, they are not patentably distinct from each other because both the presently claimed invention and the invention as claimed in U.S. Patent 7,320,858 are drawn to methods of making an array of different ceramic materials via delivering

a first component of ten or more different ceramic materials to various regions of a substrate, delivering a second component, and simultaneously reacting the first and second components.

10. Claims 15-24, 26, 30-35, 42-43, 45-48, 51-56, 58-60, 64-72, 74-91, 93-97, and 99 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-59 of U.S. Patent No. 6,864,201. Although the conflicting claims are not identical, they are not patentably distinct from each other because both the presently claimed invention and the invention as claimed in U.S. Patent 6,864,201 are drawn to methods of preparing and evaluating crystalline zeolite materials comprising providing ten or more solutions at ten or more regions of a substrate wherein each of the ten or more solutions comprise one or more components of a candidate zeolite material, simultaneously crystallizing one or more components from each of the ten or more solutions to form an array, screening the candidate crystalline zeolite materials for a morphological property wherein the solvent is varied at each region, solids are utilized, regions are less than 1 cm^2 , and variations thereof.

11. Claims 15-22, 26, 30-35, 43, 45-48, 51-56, 58-60, 64-65, 67, 69, 71-72, 74, 78-83, 85-87, 89-91, 93-97, and 99 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-28 of U.S. Patent No. 6,686,205. Although the conflicting claims are not identical, they are not patentably distinct from each other because both the presently claimed invention and the invention as claimed in U.S. Patent 6,686,205 are drawn to methods of evaluating an array of materials comprising providing an array of materials comprising at least ten different inorganic materials at discrete regions of a substrate wherein

each of the at least ten materials comprises first and second components with a gradient of stoichiometries, screening the array for a useful property utilizing spectroscopy or microscopy wherein the array comprises at least 100, at least 1,000, at least 10,000 different inorganic materials, the regions have an area less than about 10 cm^2 , the inorganic materials can be intermetallics, metal alloys, magnetic alloys, ceramics, etc., and variations thereof.

12. Claims 15-17, 23-24, 26, 42-43, 45-48, 60, 64, 67-69, 72, 74-78, 80, 83-85, 88-91, 93, 96-97, and 99 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-46 of U.S. Patent No. 6,649,413. Although the conflicting claims are not identical, they are not patentably distinct from each other because both the presently claimed invention and the invention as claimed is drawn to methods of preparing and evaluating arrays of zeolite material comprising delivering components of a first zeolite material to a first region of a substrate, delivering components of a second zeolite material to a second region on a substrate, mixing the components, reacting components, screening for microstructure wherein varied gradients are utilized, 100 discrete regions, and variations thereof.

13. Claims 74, 77, 79, 80, 96-97, and 99 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-72 of U.S. Patent No. 7,034,091. Although the conflicting claims are not identical, they are not patentably distinct from each other because both the presently claimed invention and the invention as claimed in U.S. Patent 7,034,091 are drawn to methods of preparing and evaluating non-biological polymers comprising preparing an array comprising first and second copolymers on a substrate, delivering

a first component and a second component, polymerizing, screening for a property of interest and variations thereof.

14. Claims 15-24, 26, 30-35, 42-43, 45-48, 51-56, 58-60, 64-72, 74-91, 93-97, and 99 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-81 of U.S. Patent No. 6,420,179. Although the conflicting claims are not identical, they are not patentably distinct from each other because both the presently claimed invention and the invention as claimed in U.S. Patent 6,420,179 are drawn to methods of making and screening an array of organometallic compounds comprising forming at least ten different organometallic compounds at discrete regions of a substrate, delivering a first component, delivering a second component, mixing, screening for a useful property wherein at least 100 or at least 1000 compounds are formed, each region is about 1mm^2 or less, and variations thereof.

15. Claims 15-24, 26, 30-35, 42-43, 45-48, 51-56, 58-60, 64-72, 74-91, 93-97, and 99 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-46 of U.S. Patent No. 6,410,331. Although the conflicting claims are not identical, they are not patentably distinct from each other because both the presently claimed invention and the invention as claimed in U.S. Patent 6,410,331 are drawn to methods of making and evaluating arrays of materials comprising providing an array comprising at least 10 different organometallic materials at discrete regions of a substrate, screening the array for a useful property, wherein the materials are polymers, quartz, resins, inorganic crystals, etc., regions have an area less than 1 cm^2 , and variations thereof.

16. Claims 15-24, 26, 30-35, 42-43, 45-48, 51-56, 58-60, 64-72, 74-91, 93-97, and 99 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-52 of U.S. Patent No. 6,346,290. Although the conflicting claims are not identical, they are not patentably distinct from each other because both the presently claimed invention and the invention as claimed in U.S. Patent 6,346,290 are drawn to methods of evaluating an array of nonbiological polymeric materials comprising first and second components, polymerizing, and screening.

17. Claims 15-24, 26, 30-35, 42-43, 45-48, 51-56, 58-60, 64-72, 74-91, 93-97, and 99 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-30 of U.S. Patent No. 7,442,665. Although the conflicting claims are not identical, they are not patentably distinct from each other because both the presently claimed invention and the invention as claimed in U.S. Patent 7,442,665 are drawn to a method of preparing and evaluating crystalline inorganic materials comprising providing ten or more solutions at ten or more discrete locations on a substrate, simultaneously crystallizing one or more components, and screening for a morphological property.

Future Communications

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AMBER D. STEELE whose telephone number is (571)272-5538. The examiner can normally be reached on Monday through Friday 9:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Low can be reached on 571-272-0951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Amber D. Steele/
Patent Examiner, Art Unit 1639

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